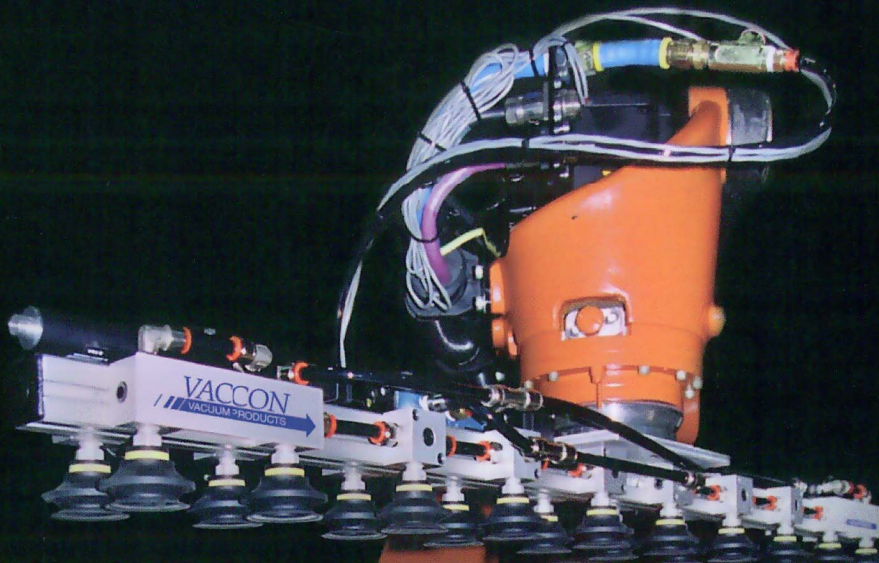


Vaccon Vacuum Pumps, Cups & Accessories
New – *Vaccon End-of-Arm Tooling*

VACCON
 VACUUM PRODUCTS
 2007 Master Catalog



New! End-of-Arm Tooling

*Vaccon...
 Better Design
 Better Performance
 Better Value
 Simply Better!*



Cartridges Modular Vacuum Pumps Pneumatic Blow-off Vacuum Pumps Air Saver Pumps Adjustable Dirt Tolerant Pumps Cups Material Conveying Air Amplifiers/Blowers

*Serving the:
 Robotics, Automation, Packaging, Electronics, Printing, Automotive, Pharmaceutical,
 Plastics, Food Processing, Chemical, Medical, Appliance, Laboratory, Glass, Paper, Gas,
 Marine, Injection Molding, HVAC, and Process Control Industries for over 35 years*



VENTURI VACUUM PUMPS FOR AUTOMATION AND PROCESS CONTROL APPLICATIONS

**Venturi Vacuum Cartridges
 for Vaccon Pumps & OEM Equipment**

Vaccon offers 13 different single-stage venturi vacuum cartridges for the Mini and Mid Series vacuum pumps and manifolds. Ideally suited for machine designers, venturi cartridges easily fit into OEM cavities creating an unrecognizable (proprietary) vacuum source. Vacuum cartridges are a combination of interchangeable nozzles and diffusers that enable you to optimize pump performance based on desired vacuum level, vacuum flow, evacuation speed and air consumption.



"Vaccon Cartridges - The Power Inside"

Miniature Venturi Vacuum Pump

Fastvac Mini Series: VP00



The VP00 Fastvac Mini Series air-powered venturi vacuum pumps are compact, lightweight, dirt tolerant and highly efficient, capable of reaching 28"Hg[948mbar]. Dimensions: 2.4" x 0.63"

**Mid-size Venturi Vacuum Pump
 with Interchangeable Cartridges**

Fastvac Mid Series: VP10 & VP20

The VP10 & VP20 Fastvac Mid Series air-powered venturi vacuum pumps are highly efficient, capable of reaching 28"Hg [948mbar], dirt tolerant, and include a silencer for quiet operation. Lightweight and compact, they can be easily mounted close to the vacuum point for fast response. All Mid Series pumps incorporate Vaccon's interchangeable venturi cartridge system that allows designers to choose from 11 different cartridge assemblies to optimize pump performance to meet their specific application needs.



Max-size Venturi Vacuum Pump

Fastvac Max Series

The Fastvac Max Series air-powered venturi vacuum pumps provide high vacuum flow rates for the rapid evacuation of large volumes of air or for overcoming leakage in order to sustain high vacuum levels while handling porous materials.

Highly efficient, capable of reaching 28"Hg [948mbar], the VP80's and VP90's are dirt tolerant and include a straight-through silencer. Unlike the Mid Series pumps that use interchangeable cartridge assemblies, the Max Series pumps (VP80 & VP90's) use a non-removable press-fit venturi assembly.



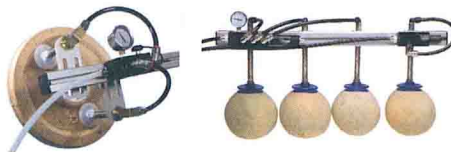
VP80-200 & 250



VP90-300 & 350

Multi-port Venturi Vacuum Pump

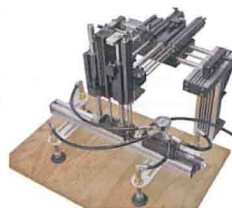
**Mid & Max Series:
 VP10, 20, & 80-MP 4 Ports**



Vaccon's new Multi-port venturi vacuum pumps combine a venturi with a manifold to distribute vacuum to multiple locations. The result is a compact vacuum generation and distribution system for End-of-Arm Tools and applications where one pump powers multiple cups. VP10, VP20, and VP80-MP pumps have 4 vacuum ports that distribute vacuum equally to 4 locations.

Max Series: VP90-MP 6 Ports

The VP90-MP pumps have 6 vacuum ports that distribute vacuum equally to 6 locations, both with "Home-Run" plumbing. The streamlined design minimizes vacuum loss, maximizes vacuum flow and speeds cycle times for safe, efficient lifting operations.



**FastVac Pumps with
 Air Saver Technology**

On-Demand Vacuum - Saves Air - Safe Operation

Vaccon's Air Saver pumps are an all-pneumatic system that minimizes compressed air usage by creating, monitoring and maintaining vacuum for safe energy efficient operations. For pick and place applications handling non-porous materials, the Air Saver pumps will maintain a strong holding force, conserve compressed air, and hold the part even if the compressed air supply is interrupted providing an extra level of safety when handling large loads. For vessel evacuation applications such as wood and composite clamping, Air Saver pumps maintain vacuum for long periods of time and only consume compressed air to overcome system leaks resulting in 90% air savings. The system includes a venturi vacuum pump, vacuum check valve, air piloted air valve and all-pneumatic vacuum switch. The switch is adjustable from 0 to 28"Hg [948mbar] and the hysteresis is 3"Hg [102mbar].



**Venturi Vacuum Pumps with
 Pneumatic Blow-off**

Fastbreak Series Pumps

**Mini
 VP0X/VP0X-ADJ**



**Mid
 VP1X/VP1X-ADJ**



**Mid
 VP2X & VP2X-ADJ**



**Max
 VP8X/VP8X-ADJ**



Vaccon's Fastbreak air-powered venturi vacuum pumps are trusted for accurate part placement and rapid part release. Reliable, providing both vacuum and blow-off in one pump using only one compressed air line. No electricity required. The integrated pneumatic high-speed blow off pumps provide a fixed duration blow off based on the volume of the of the housing. With the VP0X-, VP1X-, VP2X- and VP8X-ADJ adjustable vacuum pumps, you can control the intensity of the blow-off using one fingertip adjustment knob.

Solenoid Operated Venturi Vacuum Pumps with Pneumatic Blow-off

VP2XV-(ADJ) & VP8XV-(ADJ) air-powered venturi vacuum pumps are the solution for accurate part placement and rapid part release operations that require a solenoid-operated pump with a pneumatic blow-off.



Mid Series:
VP2XV & VP2XV-ADJ

The VP2XV and VP8XV pumps provide a complete, compact system that includes a pre-plumbed and pre-sized solenoid-operated control valve. The reliable VP2XV and VP8XV pumps provide both vacuum and blow-off in one pump, using only one compressed air line and one electric signal, minimizing the number of outputs required.



Max Series:
VP8XV & VP8XV-ADJ

The integrated pneumatic high speed blow-off provides a fixed-duration blow-off based on the volume of the chamber. With the VP2XV-ADJ and VP8XV-ADJ, you can control the intensity of the blow-off using one fingertip adjustment knob.

Venturi Vacuum Pumps with 3-way Integral Solenoid Valve

Fastvac Series Pumps

VP01 and VP30 pumps are solenoid-controlled venturi vacuum pumps that generate vacuum only when needed, minimizing compressed air consumption. The integral solenoid valve provides instantaneous response for high speed assembly and pick and place applications. The Mid Series pumps use an interchangeable venturi cartridge system. Lightweight and compact, VP01 and VP30 pumps are placed directly at the point of use to eliminate plumbing between components and to ensure high cycle rates for increased productivity.



Mini Series: VP01



Mid Series: VP30

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Venturi Vacuum Pumps with Solenoid Operated Vacuum and Blow-off

The VP01QR and VP30QR pumps are solenoid-controlled venturi vacuum pumps that feature a second solenoid to control blow-off air for rapid part release. The integral suck and blow circuit design of the VP01QR & 30QR provides instantaneous response for high speed assembly and pick and place applications.



Mini Series
VP01QR

The blow-off is at line pressure, and is internally plumbed so that only one air and vacuum line is required. VP30QR design flexibility is further increased with our interchangeable venturi cartridge system.



Mid Series
VP30QR

Venturi Vacuum Pumps with Apple Core Style Mount

VP10 & VP1X Series Mid Size Pumps with Interchangeable Cartridges and Optional Pneumatic Blow-off

"Apple Core" pumps combine the features of the VP10 or VP1X Series pumps with the ease and position flexibility of the apple core mounting system. As an integral part of the pump, the apple core mount and clamp creates a swivel arm assembly that allows the pump/cup to rotate 360 degrees in 2 axis positions – ideal for handling curved parts. Choose from 11 different interchangeable venturi cartridges to optimize performance, minimize air consumption and maximize holding force.



VP1X w/ Vacuum Cup Swivel Joint

Mid Series Segmented Manifolds

Segmented Manifold Series: VMS

The VMS Mid Series Segmented Vacuum Manifolds are individual vacuum segments with a common air supply that provides independent vacuum to multiple locations. Segments can be individually configured or they can all be the same. All segments offer integral NC solenoid control for vacuum creation. For added functionality, specify a valve for blow-off and a vacuum switch/sensor for part present/vacuum achieved feedback.



Fixed Length Vacuum Manifold

Fixed Length Manifold Series: VMF

All Fixed Length Vacuum Manifolds and modules are designed and manufactured to meet specific customer application requirements for new or existing equipment. VMF manifolds offer designers the freedom and flexibility to create the most efficient and economic vacuum manifold system to meet their automation environment. Custom designed manifolds can be an array of individual pumps or a single manifold block with customer selected options. For chemical compatibility or hazardous environments, design using seal-less (no o-rings), preset, fixed venturi cartridges.



High Vacuum Venturi Pump

HighVac Series: HVP 100, 200, 300

The HighVac Series of air-powered venturi vacuum pumps generate vacuum levels up to 29.5" Hg [999mbar] and offer a wide range of vacuum flow rates. Often used to replace expensive, noisy, heat generating, electric pumps, HVP pumps are quiet and maintenance free, ideal for degassing viscous liquids such as silicone and other mold compounds, vessel evacuation, and process control for small shops, labs and HVAC applications.



Cylindrical Venturi Pumps

Ultra-Mini J Series: JS-40UM

The JS-40UM (Ultra-Mini) cylindrical venturi vacuum pump is the smallest complete venturi vacuum pump that Vaccon offers. Incredibly compact and powerful – it measures the size of your finger tip and generates up to 27" Hg [914mbar]. Lightweight, quite and cool operating, JS-40UM pumps fit in confined spaces, where they can be mounted in-line near the point of use for rapid response.

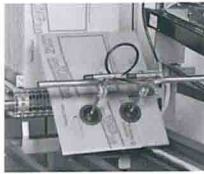


Ideal for gas sampling and analysis, leak testing, portion/drip control for dispensing liquids, liquid transfer, pick and place for small, non-porous parts, and small vessel evacuation. This pump is used as the vacuum source for Vaccon's vacuum pencil kit.

Cylindrical Venturi Pumps

Mini J Series: "M" (mini) Version

The J Series "M" (Mini) version cylindrical venturi vacuum pumps feature a high power-to-size ratio, measuring only 3"L x 3/4" OD. Single stage design allows ingested contaminants to pass through the pump without clogging enduring continuous operations. No seals and no moving parts. Rugged and reliable. Ideal for carton erecting, vessel evacuation, medical and pharmaceutical applications, food processing, high temperature and caustic applications.



Mid & Max J Series

J100, 150, 200, 250, 300 & 350

The larger J Series pumps offer higher vacuum flows for rapid evacuation of large vessels and to overcome leakage to sustain high vacuum levels when handling porous materials. The single-stage design allows ingested contaminants



to flow through the pump without clogging ensuring continuous operation. Constructed of a single material, with no seals or moving parts, J Series pumps are virtually indestructible. J Series pumps provide a constant vacuum flow, rather than a fluctuating flow typically associated with diaphragm pumps. They operate with an instantaneous response in pulsed applications or on a continuous basis. Ideal for carton erecting, vessel evacuation, medical and pharmaceutical applications, food processing, high temperature and caustic applications.

Cylindrical Pumps

Ideal for Specialty Materials

The J Series pumps can be manufactured in a variety of materials, including Teflon®, stainless steel and PVC, PEEK, making them ideal for use in adverse operating conditions.



With a straight through design, contaminants pass through without clogging. Press fit nozzle, no seals or o-rings. Custom sizes and shapes available.

Liquid Powered Venturi Pumps

The powerful JW Series liquid-powered venturi vacuum pumps generate vacuum levels up to 29.5"Hg [990mbar] at pressures as low as 40 PSI [2.5 Bar]. All JW pumps are custom designed and manufactured to meet specific customer application requirements for operating pressure, liquid consumption, vacuum flow, and vacuum level with a maximum water lift of 32 feet [8.4M]. Generating near perfect vacuum, JW pumps are recommended for degassing, reverse osmosis water columns, mixing liquids with fruit juice concentrates or chemicals for dilution, blending liquids and slurries, extracting solvents, producing emulsions, elevating water, cleaning liquid transfer lines, evacuating liquids from wells or sumps and to circulate pump solutions.



JW Series

Inline Venturi Vacuum Pump

Unlike standard venturi vacuum pumps where the vacuum port is 90° from the supply port, Vaccon's air-powered VPI-90H inline venturi vacuum pumps feature an air-supply port and vacuum port on the same axis to consolidate space. VPI-90H pumps vertically mount to robotic arms to create single or densely populated arrays of pump/cup to accommodate and lift products of any size, shape, or weight. Internal threads on the vacuum port enable vacuum cups to connect directly to the pump while the external threads attach directly to the end of arm tool. VPI-90H's feature an additional vacuum port for a vacuum switch/ sensor to ensure accurate part detection or for a connection to an externally supplied blow-off.



VPI-90H

Adjustable or Fixed Dirt Tolerant Venturi Vacuum Pumps

VDF & FDF Series

The VDF Series is a unique Vaccon innovation that places the vacuum port and exhaust path inline making a straight-through venturi vacuum pump. These compact pumps offer both high flow rates up to 120 SCFM [3400 LPM] and high vacuum levels up to 25"Hg [847mbar]. Developed for extremely dirty and dusty environments such as foundries, refractory and bagging operations, VDF pumps don't clog, lose suction or require a vacuum filter. VDF pumps are field-adjustable allowing you to regulate the vacuum flow and vacuum level to meet your application requirements.



This maximizes energy efficiency by consuming only the compressed air necessary to do the job.

The FDF Series offers the same inline, dirt tolerant design as the VDF Series without the adjustability. The FDF Series have a "fixed" performance level and are set to generate the maximum vacuum level 25"Hg [847mbar] and maximum vacuum flow of the comparable VDF Series pump.

Adjustable Air Amplifiers/Blowers

CDF Series Air Amplifier Blower: High Output Flow

The CDF Series air amplifiers generate high output flow using a small volume of compressed air. This efficient use of air makes CDF air amplifiers a cost-effective alternative to electric blowers or raw compressed air. Ideal for inflation and deflation, drying, cooling, blowing, air, smoke, mist or fume evacuation. Field adjustable for individual applications. No heat generated, no electricity required. Safe operation.



CDF Series Air Amplifier Material Handling: High Vacuum Flow

CDF Series air amplifiers generate high vacuum flow, overcoming leaks inherent in handling porous objects such as foam or fabric and other materials that many consider too challenging to handle with vacuum. With or without a vacuum cup, CDF air amplifiers safely transfer irregular shaped items. To meet a wide range of applications, air velocity and air flow are field adjustable to compensate for the pressure level supplied. CDF air amplifiers can achieve amplification ratios as high as 40:1 (output to input). The CDF air amplifier's straight-through design allows dirt and debris to pass through without clogging providing maintenance-free operation.



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Material Conveying Vacuum Pumps



DF Series

The DF Series of high flow material conveying vacuum pumps provide a simple, reliable and cost effective method of in-line transfer of bulk materials, complex shapes, individual objects, and sedge. The DF pump's unique capability to create instantaneous vacuum flow and high air velocity, combined with its straight-through, smooth bore design allows material to pass directly through the pump at high speeds without interference or clogging. Available in 17 standard models with inside diameters from 1/8" [6mm] to 4" [100mm].

Custom Materials and End Configurations

For chemical compatibility, heat and environmental requirements, food and medical applications, Vaccon's DF Series offers custom materials (Teflon®, stainless steel, PVC, PEEK), special coatings, and modified threads including internal and external threaded exhaust and/or vacuum ports with NPT or G port threads.



Silencers

AA Series Silencers

AA Series silencers have excellent noise reducing characteristics with minimal resistance to air flow. The large surface of the felt element resists contamination far more than other materials such as sintered bronze, steel mesh or porous polyethylene.



ST Series Silencers

The ST Series Silencers are designed with a straight through flow path that eliminates clogging by allowing the contaminants to pass directly through the silencer. Even in the most adverse conditions, contaminants pass through the silencer making the ST Series ideal for silencing vacuum pumps that are continuously ingesting dirt and debris.



STAA Series Silencers

The STAA Series hybrid silencer offers increased noise reduction by combining an ST silencer with an AA silencer. The (closed-end) AA silencer is attached to the end of a modified ST silencer, thus removing the flow through feature of the standard ST Series silencers.



FA-51 Series Silencers

The FA-51 Series silencers offer remarkable noise reduction for high volume exhaust applications without causing back pressure. These silencers are ideal for quieting large air valves that must exhaust quickly to maintain high cycle rates.



Vacuum Cups

Bellows Cups

Bellows cups have a pliable outer rim that will conform to curved or uneven surfaces while the bellows sections compensate for inconsistent stack heights.

Under vacuum the accordion-style bellows cup will collapse on contact. The collapsing action simulates a short cylinder stroke lifting the product a short distance, possibly saving the need for a separate lifting mechanism.



Single Bellows



Multi-Bellows

Flat Cups

Flat cups without cleats are flexible and work well in applications that do not require lifting heavy loads. Flat cups with cleats are strong with a rigid, low profile that will lift heavy loads. The low profile allows heavy loads to be lifted vertically without the cup "peeling" away from the product surface or deforming the object being lifted. These cups perform well when gripping smooth, flat, heavy objects such as steel, glass (television picture tubes) and coated corrugated.



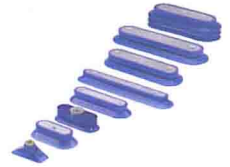
Universal Cups

Universal cups can handle flat or slightly curved surfaces. Universal cups do not have cleats.



Oval Cups

Like cleated cups, oval cups have heavy load capabilities due to their rigid design and large vacuum work area. Oval cups have the largest lifting force because they provide the most surface area for a given footprint.



Ultra-Miniature Cups

Ultra-Miniature cups are ideal for use in picking up extremely small parts such as computer chips, wafers and electronics components. In high temperature materials, Ultra-miniature cups may be used in laboratory and food processing environments.



UH Rigid Cups

UH Rigid Cups are ideal for porous material handling applications. Vaccon also offers Specialty Cups in a variety of styles, materials and sizes. Consult factory.



Vacuum Cup Fittings

Designed with large thru bores, Vaccon fittings connect to vacuum cups, vacuum pumps and spring levelers ensuring unrestricted vacuum flow for safe material handling operations. For plumbing flexibility, Vaccon offers 9 different fitting groups in clear chromate coated aluminum or brass with NPT, M5 or 1032 male and female threads.



Manual Pick and Place of Small Components



Vacuum Pencil Kit

Utilizing a miniature Vaccon venturi vacuum pump as its vacuum source, the vacuum pencil kit includes a vacuum pump, vacuum pencil and a variety of interchangeable ultra-mini cups and probes. Vaccon's Vacuum Pencil easily adapts to handling different objects by simply changing the vacuum cup and probe. Lightweight and compact, the vacuum pencil kit is ideal for bench top work.

Vacuum Check Valves

For vacuum applications requiring high flow and low cracking pressure Vaccon vacuum check valves seal and hold vacuum for safe, energy efficient operations for clamping, pick and place and vessel evacuation applications.



Designed specifically for vacuum applications, they offer high flow capacity with minimal flow restriction and feature extremely low cracking pressures of less than 1"Hg. The large unrestricted flow path ensures high flow at low vacuum levels. The low cracking pressure allows the vacuum system to reach its maximum vacuum level before the check valve seals off the system.

Vacuum Gauges

Vaccon vacuum gauges are used in almost every area of automation including applications in pneumatics, process control, packaging, printing, medical, food and pharmaceutical. For accurate monitoring, these gauges provide easy visual confirmation for the operator, ensuring consistent performance. Available dry or glycerin filled, two dial sizes, and three mounting positions.



Pressure Gauges

Vaccon's Pressure gauges offer accurate monitoring with easy visual confirmation for the operator, ensuring consistent performance. They are an effective diagnostic tool allowing you to debug and troubleshoot systems. They are economical with low cost, long life. Options are dry or glycerin filled and two mounting positions.



In-Line Vacuum Filters

Add Vaccon's compact in-line vacuum filters to vacuum lines or air-supply lines to trap dirt and debris from entering the process, or to the exhaust port to capture airborne contaminants. Vaccon's pleated-element design offers a filter with significantly longer life and much higher flow capacity than non-pleated, porous plastic designs. The large surface area increases filter life while reducing maintenance costs.



Pneumatic Vacuum Switch

Converts vacuum signal into pneumatic signal Vaccon's Pneumatic Vacuum Switch provides a repeatable pneumatic output signal when reaching the user-defined vacuum set-point level and is appropriate for use in all vacuum systems. The output signal is a voluminous 2.5 SCFM at 100 PSI, with a response time of 64 ms at 90 PSI. This high flow and fast response makes the switch ideal for high-speed pneumatic circuits with lengthy plumbing lines and for continuously monitored vacuum applications such as vacuum clamping (chucking), vacuum forming, vessel evacuation, and pick and place.



VSP Series

Adjustable Mechanical Vacuum Switches

VS-4 & 5 Series, SX-4 & -5 Series, SX-4 & 5SB Series

Vaccon's vacuum switches are ideal in automated systems to generate a low current electrical signal for input to a PLC or other logic controllers. The adjustable switches are normally open, diaphragm operated, and contain low-stress deflecting contacts instead of sliding or pivoting parts for high reliability and long life.



VSW5A Series

Vaccon's VSW5A is a high-current capacity switch capable of switching line voltage loads from 5 Amps to 125 VAC. The sealed vacuum switch is field adjustable from 5 to 28"Hg [169 to 948 mbar]. The vacuum level adjustment screw is easily accessed below the DIN connector. Wiring can be either normally open or normally closed. UL & CSA approved.



Ultra-Mini Electronic Vacuum Switches

Vaccon's ultra-miniature electronic vacuum switches provide a switched output for part present detection and can be easily mounted to Vaccon's Mini, Mid and MP Series pumps. Optional Quick Disconnects available.



VSM(N or P) Series

Miniature Solid State Vacuum Switches

Vaccon's miniature solid state vacuum switches provide a switched output and can be easily mounted to Vaccon's Mid Series vacuum pumps at the factory or field installed. Note: Both the set-point and hysteresis are adjustable and include an LED indicator. Optional Quick Disconnects available.



VSX(L, N, P) Series

Miniature Solid State Pressure Switches

Vaccon's miniature solid state pressure switching devices interface from pressure to electrical control circuits providing precision control for feedback mechanisms or system monitoring. Both the set-point and hysteresis are adjustable and include an LED indicator. Optional Quick Disconnects available.



PSX(L, N, P) Series

Solid State Vacuum Switch and Sensor with Digital Display

The VDS-1000 compact all-in-one output device and digital gauge reduces the number of components in your system. With two switch outputs and one analog output, it's possible to monitor the high and low limits for vacuum control and system conditions.



VDS-1000

In pick and place and robotic material handling applications use the first switch to detect part present and the second switch to signal the robot or tool that the working vacuum level has been achieved and it is safe for the tool to move. The analog output allows software control over the entire vacuum and pressure range with the ability to track system vacuum/pressure changes in real time. The switches are highly flexible due to selectable output functions such as switching point hysteresis and window comparator. Vacuum switch reads both vacuum and pressure. Optional Quick Disconnects available.

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Solid State Pressure Switch and Sensor with Digital Display

The PDS-1110 compact

all-in-one output device and digital gauge reduces the number of components in your system. With two switch outputs and one analog output, it's possible to monitor the high and low limits for pressure control and system conditions. The analog output allows software control over the entire vacuum and pressure range with the ability to track system vacuum/pressure changes in real time. This is a compound switch device that operates from full vacuum to full pressure. Optional Quick Disconnects available.



PDS-1110

Ultra-Mini Electronic Vacuum Sensor

Vaccon's ultra-mini electronic vacuum sensors provide continuous voltage output (1-5v) proportional to the system vacuum level. Connected to a feedback interface such as a digital display or PLC, the VTMV is a cost effective, reliable sensor that maintains application consistency. Sensors can be mounted directly to Vaccon's Mini, Mid and MP Series pumps. Optional Quick Disconnects available.



VTMV Series

Miniature Solid State Vacuum Sensors

Vaccon's miniature solid state vacuum sensors provide continuous voltage or current output proportional to the system vacuum. These sensors are available as a 4-20mA, or 0-5VDC output devices. Because sensors provide a constant signal, system design may be reconfigured with software changes rather than mechanical adjustment typical of a switch. Solid state sensors can be assembled directly onto all Vaccon Mid Series vacuum pumps at the factory or in the field. The VSSA is designed to interface with a current-input module of a PLC and provides an analog current output proportional to the pressure level present at the sensor. The VSSV is designed to interface with a voltage-input module of a PLC and provides an analog voltage output proportional to the pressure level present at the sensor. Optional Quick Disconnects available.



VSSA & VSSV Series

Miniature Solid State Pressure Sensors

Vaccon's solid state pressure sensors provide continuous voltage or current output proportional to the system pressure. These sensors are available as a 4-20mA, or 0-5VDC output devices. Because sensors provide a constant signal, system design may be reconfigured with software changes rather than mechanical adjustment typical of a switch. The PSSA is designed to interface with a current-input module of a PLC and provides an analog current output proportional to the pressure level present at the sensor. The PSSV is designed to interface with a voltage-input module of a PLC and provides an analog voltage output proportional to the pressure level present at the sensor. Optional Quick Disconnects available.



PSSA & PSSV Series

Electronic Quick Disconnects

For Digital and Solid State Vacuum and Pressure Switches and Sensors Vaccon offers electrical Quick Disconnects for Vaccon digital and solid state vacuum and pressure switches and sensors. With a screw-plug connection, Vaccon Quick Disconnects save time and money by eliminating the labor intensive assembly process of joining/soldering wires together. Vaccon switches and sensors are available with a 3 or 5 pole male connector that can be factory installed or field wired. Depending on your wiring needs, Vaccon also offers field wire-able female cordsets for complete wiring systems that quickly, easily and safely connect to system controllers, PLC's and other electronic extension connectors.



NEW!

Vaccon End-of-Arm-Tooling Components (VEOAT)



All VEOAT products are compatible with 1" (25mm) and 1.5" (40mm) extrusions. Vaccon's new, modular End-of-Arm Tooling components offer everything you need to create a complete "wrist-down" EAOT for your material handling operations. Vaccon's EAOT innovative component design is modular, lightweight, compact, and easy-to-connect. Using Vaccon's EAOT, you can integrate vacuum pumps, suction cups, spring levelers, fittings, and manifolds using simple erector-set connectivity in minimum design time. Order VEOAT products separately and build your own tooling on-site in minimal time.

NEW!

Complete VEOAT Solutions Designed, Built & Tested at Vaccon



Vaccon offers complete pre-built VEOAT solutions fully configured, plumbed, and tested. VEOAT solutions ship assembled using one robot-to-VEOAT connection for easy, out-of-the-box installation. Take advantage of our extensive vacuum knowledge to select the proper vacuum pump/cup combination and design your tool. Vaccon will build your tool and test it using your product at our in-house Tech Center, usually within the same day. Call Vaccon first. We will save you time and money.

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Let us help you get the pump you need:

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Spring Levelers - Level Compensators

When handling sensitive objects such as fruit, Vaccon Spring Levelers feature a soft touch allowing compliance for end-of-arm tools to ensure that all cups make contact. This is especially important when handling large objects such as sheets of plywood that may be warped and the tool has multiple vacuum cups that must make contact. Vaccon offers a large range of sizes and travel lengths 0.2" [5mm] to 3.6" [91mm] to accommodate the necessary over-driving by the lifting mechanism to bring all cups in contact. We offer large thru-bores that allow higher vacuum flow to overcome leakage and for rapid evacuation to ensure safe handling operations. The Series 3 Levelers have high performance bearings that prevent binding from side loading, provide a smooth operation over long strokes and prolong leveler life.



VSL Series (1, 2, 3)

Light Duty Spring Leveler Mounting Brackets

Designed for flexible manufacturing operations, SLBF and SLBS Series mounting brackets attach to the top, sides or bottom of 1" [25mm] and 1.5" [40mm] extrusions. Easily mounted and adjusted, the Light Duty Spring Leveler Brackets readily rotate, slide or pivot for accurate part alignment. If the part size or process should change, you can reposition the brackets in a matter of seconds. Using your extrusions or ours, SLBF and SLBS Series mounting brackets connect to our VSL Series Spring Levelers and a variety of our venturi vacuum pumps to create a simple, off-the-shelf End-of-Arm device.



SLBS/SLBF Series

Heavy Duty Spring Levelers/ Level Compensators

Vaccon's Spring Leveler design surpasses the competition. We offer large thru-bores that allow higher vacuum flow to overcome leakage and for rapid evacuation to ensure safe handling operations. Recommended for applications which require lifting heavy loads without deflection, Vaccon Heavy Duty Spring Levelers include a rigid mounting bracket for a strong, solid connection to 1.5" [40mm] extrusions.



SLB40 (2, 3)

Adjustable, Fixed Extension Shaft & Mounting Brackets

Adjustable, Fixed Extension Shaft & Bracket is a rigid, non-moving rod that mounts to the top, sides or bottom of 1.5" [40mm] extrusions. Once the shaft is adjusted to meet a specific height requirement, the bracket is clamped into a fixed position. Designed for flexible manufacturing operations, the FEB40 Series is easily repositioned by simply loosening 2 collar screws and sliding the shaft up or down to meet the new height requirements. For added adjustability, add an adjustable universal bracket to slide the FEB40 left or right.



FEB40 (2,3)

Vacuum Cup Swivel Joint

Handling curved surfaces is easy with Vaccon's new Vacuum Cup Swivel Joint. The CSJ3 swivel joints attach to a spring leveler and vacuum cup providing a full 40° angular movement. To control the degree of swivel, simply tighten the collar nut located on top of the swivel joint to restrict movement. Developed in conjunction with Vaccon spring levelers, the CSJ3 swivel joint assemblies feature exceptionally large flow paths to safely handle porous objects. Depending on height and tooling requirements, Vacuum Cup Swivel Joints are interchangeable with the VSL3, SLB40-3, and FEB40-3 Series spring levelers.



CSJ3 Series 3

Universal Mounting Brackets - Standard, Adjustable, Angled

Compatible with 1" (25mm) and 1.5" (40mm) extrusions Universal Mounting Brackets are simple, lightweight connectors that attach Vaccon vacuum pumps, vacuum cups, spring levelers and manifold blocks to 1" or 1.5" extrusions. Available in 3 models, standard, adjustable or angled, our Universal Brackets are keyed to fit securely in 1/4" [6.5mm] or 5/16" [10mm] T-slots, remain square and increase holding force.



Vacuum Cup Mount/ Manifold Block

Combination Cup Mount and Manifold Block Compatible with 1" (25mm) and 1.5" (40mm) extrusions Simplify your End-of-Arm tooling devices using our new dual purpose MB Series - Vacuum Cup Mount/Manifold Block.



Whether you are mounting vacuum cups to extrusions and/or distributing vacuum to multiple locations, the MB Series streamlines your design with one multi-functional component. For design and plumbing flexibility, the MB Series features five vacuum ports and three mounting options that easily connect vacuum pumps and cups to 5/16" [10mm] or 1/4" [6.5mm] T-slot extrusions. Extra vacuum ports allow optional accessories to be directly mounted to the manifold block i.e. vacuum gauges or remotely plumbed such as vacuum switches, sensors or blow-off capabilities. High vacuum flow is critical for handling porous objects. Vaccon offers up to 3/4" NPT ports to ensure high flow paths.

T-Slotted Extrusions for End-of-Arm Tooling

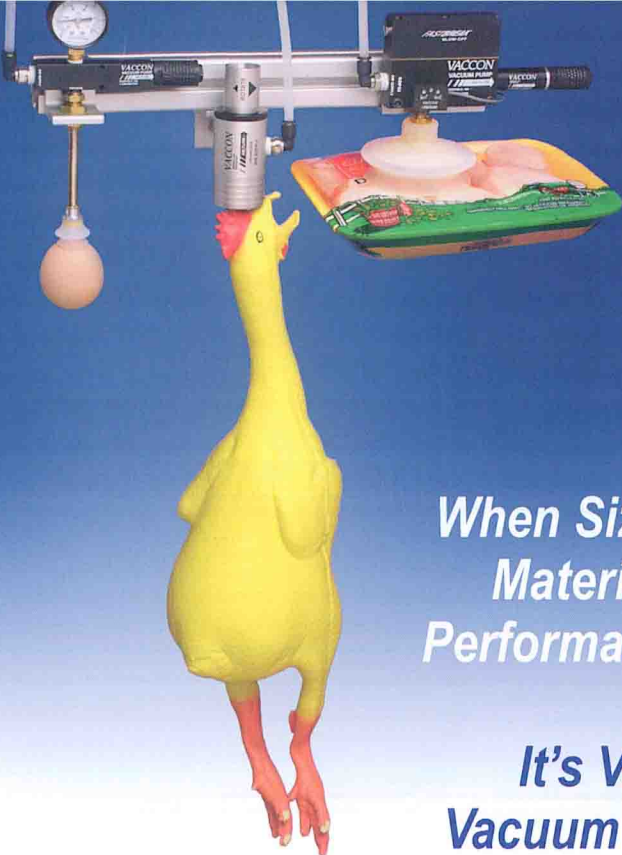
1.0" (25mm) and 1.5" (40mm) extrusion Vaccon End-of-Arm Tooling devices are available factory built and tested with your choice of 1" [25mm] or 1.5" [40mm] extrusions. Using modular, lightweight aluminum components, Vaccon focuses on streamlining designs to minimize overall tool weight and maximize air line efficiency. Compatible with industry standard T-slot extrusions, Vaccon will mix and/or match profiles to your existing equipment to ensure quick and easy connections. Vaccon EOAT components may be ordered separately for on-site assembly and installation with your existing extrusion.



Push-to-Connect Fittings

Push-to-Connect (PTC) fittings are a robotic, End-of-Arm tooling component that connects all Vaccon vacuum pumps, cups, and spring levelers to each other or tubing. Vaccon provides complete End-of-Arm tooling devices that can be ordered pre-assembled and tested at the factory or shipped in component format for on-site assembly.





**When Size, Shape,
Materials and
Performance Matter**

**It's Vaccon
Vacuum Products**

**Which came first....
the chicken, the egg, or the frozen wings?
Does it matter? Not any more...**

**Whether your products evolve through the production process...
or your production process evolves to handle new products...**

Manufacturing must be flexible.

Having the right pump for the process reduces changeover times between products and processes. That's why Vaccon offers over 500 models of vacuum pumps and accessories to meet your application requirements.

With over 35 years of vacuum application and engineering experience, we relish the opportunity to work with creative engineers to design and manufacture efficient, innovative and reliable vacuum automation solutions.

At Vaccon, our entrepreneurial spirit loves a challenge. If it doesn't defy the laws of physics, (and sometimes even if it does), we're not chicken, we'll try just about anything.

Vacuum Pumps

Vaccon offers the most extensive line of venturi vacuum pumps with optional Air Saver technology, single or dual controlled solenoid valves, pneumatic blow-offs, multi-ports, apple core style mount, high vacuum pumps, variable vacuum pumps, material conveying pumps, air amplifiers, manifolds and more.

Accessories

Our complete line of accessories include vacuum cups, spring levelers, fittings, silencers, vacuum check valves, filters, vacuum and pressure, digital, mechanical and adjustable switches, sensors and gauges, electrical quick disconnects, ultra-mini vacuum cups, probes, vacuum pencils and more.

New – Vaccon End-of-Arm Tooling

Whether it's a single component or a complete system, Vaccon's EOAT product line offers light duty and heavy duty spring levelers and brackets, fixed extension shafts and brackets, vacuum cup swivel joints, universal mounting brackets, manifold block/cup mounts, extrusions, push-to connect fittings and more.

Custom Products

When off the shelf doesn't work, Vaccon engineering expertise and manufacturing capabilities can provide custom solutions to your specifications. Whether it's as simple as modifying a standard product or more complex requiring a new product with particular features or special materials, Vaccon has the solution.



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"Vaccon Pumps – Designed for Dirt"



Robotic palletizing application:
worn wooden slip sheet handling



Foundry application: VDF pump
solves maintenance problem



Refractory application: VDF pump
pick and place operation



Vacuum chuck application: J-Series
– vacuum holding for machine shop

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